

DATE: July 2, 1998

TO: Regional Engineers
Regional Associate Delivery Engineers
Regional Construction Engineers
Resident/Project Engineers/TSC Managers

FROM: C. Thomas Maki
Chief Operations Officer

Gary D. Taylor
Chief Engineer/Deputy Director
Bureau of Highway Technical Services

SUBJECT: **Bureau of Highway Circular Letter 1998-2**
Acceptance Requirements for Asphalt Binders

For the 1999 construction season, the department is changing its method of acceptance testing for asphalt binders from recovered penetration to SUPERPAVE asphalt binder test methods. This is to keep the method of acceptance consistent with the SUPERPAVE binder specification system. The penetration test is not a part of this specification system. The department and the bituminous industry had previously agreed to continue recovered penetration testing for two seasons (1997 and 1998). During the 1997 season, data were gathered to examine the validity of the price adjustments on asphalt binder according to the criteria found in Section 5 of the 1996 Standard Specifications for Construction. A review of these data showed that modifications to the 1996 specifications are required.

When applying Section 501.04.A.2, price adjustments on asphalt binders found in the 1996 specifications, Table 904-1 will be modified by the attached Special Provision for Price Adjustments on Recovered Asphalt Binder. This special provision modifies the SUPERPAVE binder specification limits to accommodate for testing tolerances, variations caused by obtaining the sample in the field, and the absorption recovery process.

Binder grade PG 64-28 is currently the only specified performance grade that uses SUPERPAVE binder tests for acceptance based on the recovered material. The new specification limits and price adjustment should be applied to all existing projects that

Bureau of Highway Circular Letter 1998-2
Page 2
July 2, 1998

require PG 64-28 through the 1998 construction season, and any claims issues related to PG 64-28 which occurred during the 1997 construction season that have not yet been resolved. During the 1999 season, this special provision will apply to all grades of PG binders. If you have any questions, please contact John Barak at 517-322-1215.

(Signed copy on file at C&T)

Chief Operations Officer

(Signed copy on file at C&T)

Chief Engineer/Deputy Director
Bureau of Highway Technical Services

Attachments

BOHTS:C&T:JWB:dmg

Subject Index: Testing

cc:	Lansing C&T Division Engineers	MRBA	
	Lansing C&T Division Technicians MAPA		
	Real Estate Division, M. Frierson	MCPA	
	Design Division, P. Miller	MCA	
	Maintenance Division, C. Roberts	MAA	
	Traffic & Safety Division, J. O'Doherty	OEO, A. Shuber	
	J. DeSana	T. Maki	
	G. Taylor	R. Knapp	
	B. Jay	V. Blaxton	
	S. Kulkarni	P. Isom	
	J. Reincke	J. Ruskowski	FHWA, J. Steele
		AUC	
	Michigan Municipal League	CRAM	

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
PRICE ADJUSTMENTS ON RECOVERED ASPHALT BINDER

C&T:JWB

1 of 1

06-25-98

C&T:APPR:GMM:MF 06-25-98

Subsection 501.04.A.2 Asphalt Binders, in the Michigan 1996 Standard Specifications for Construction is deleted in its entirety and is replaced with the following:

2. **Asphalt Binders.** Original samples of asphalt binder will be taken prior to incorporation into the mixture. The original samples will be used for Asphalt Binder Certification Verification. Asphalt binder samples will also be recovered from the daily mixture sample. This recovered binder will be considered to have been aged to the equivalent of the Rolling Thin Film Oven (T 240) residue and tested according to Table 904-1. When the results of tests performed on the recovered binder samples deviate from the specified performance grade (Table 904-1), the affected material will be subject to price adjustments on the following basis:

When the SUPERPAVE binder test results on recovered binder is found to fall outside the limits indicated in Table 501-5, the contract unit price for the mixture involved will be decreased by the percentages shown in the Table. The recovered SUPERPAVE binder test results for mixtures containing RAP shall be the same as mix produced using the performance grade of binder specified on the plans or in the proposal.

Table 501-5 Price Adjustment for Bituminous Pavement Where Asphalt Binder Recovered from the Mixture is Deficient in the SUPERPAVE Binder Requirements.

Performance Graded Binder Test	10% Decrease All PG Grades	25% Decrease All PG Grades
Dynamic Shear (TP5) on RTFO aged binder or recovered binder residue	1.80 kPa Min.	1.50 kPa Min.
Creep Stiffness (TP1), m-value	0.280 Min.	0.270 Min.
Dynamic Shear (TP5) on PAV aged binder residue	Tested for information only	
Creep Stiffness (TP1), S		